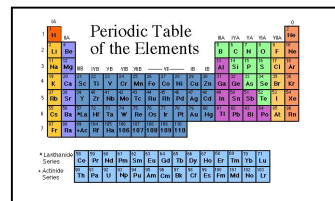


Activity #11-Graphing Trends in the Periodic Table

A standard periodic table of elements, color-coded by groups. It includes element symbols, atomic numbers, and names. The title "Periodic Table of the Elements" is at the top right. A legend at the bottom left identifies the color-coding: Lanthanides (blue), Actinides (red), and Groups (various colors).

Graphing Lists on the TI-82


(Atomic Radii Across Periods)

1. Hit "STAT," EDIT; In L3, enter list of atomic numbers from 3-20.
2. In L4, enter atomic radii (from sample periodic table) on the same corresponding line as its atomic number.
3. Hit "2nd," "STAT PLOT," 1 [ENTER]
Select "ON", [ENTER]

Select Type:  [ENTER]

Select Xlist: L3 [ENTER]

Select Ylist: L4 [ENTER]

Select Mark=  [ENTER]

4. "WINDOW" Xmin=3
Xmax=20
Xscl=1
Ymin=.5
Ymax= 2.05
Yscl=.1

5. [GRAPH]; [TRACE]

6. Create a second list in L5 entering the energy required to remove the easiest electron. Set your "WINDOW" parameters to appropriate min/max/scl ranges and "GRAPH" as above. (Shut other Plots off to enable TRACE function)